



# CITY OF LODI COUNCIL COMMUNICATION

**AGENDA TITLE:** Provide Staff Direction Regarding Water and Wastewater Rate Revenue Accounting

**MEETING DATE:** April 16, 2008

**PREPARED BY:** Public Works Director

**RECOMMENDED ACTION:** Direct the City Manager to:

- Rebalance operations and capital sub-funds within the water and wastewater utilities
- Place water/wastewater rate revenue into operations sub-fund and transfer to capital as needed through the budget process
- Simplify billing by combining the separate "infrastructure charge" with the base charge but keep the water PCE/TCE charge separate
- Update revenue/rate models in FY 08/09

**BACKGROUND INFORMATION:** In 2001, the City Council approved significant water and wastewater rate increases, in a large part, to address capital maintenance needs for these utilities. At Council's direction, the increase was itemized separately on customer bills as "replacement program".

As City staff implemented this specific direction and attempted to implement our interpretation of the Council's intentions, this revenue has been tracked separately and placed into the capital "sub-funds" within the respective utility enterprise funds. However, that rate increase was not solely intended to be for capital replacement. Increased operations costs, building an overall reserve within the enterprises, and meeting upcoming regulatory requirements were also part of the analysis that resulted in the rate increases, as described in the attached presentation.

Normally, staff would make these adjustments within the enterprise funds without specific Council direction. However, given that there is an impression that all the "infrastructure replacement" revenue is for one specific purpose, staff is presenting this for public information and for further Council direction.

**FISCAL IMPACT:** No direct impacts, however, implementing the recommendations will make future rate and revenue analysis and presentation more efficient.

**FUNDING AVAILABLE:** Not applicable.

\_\_\_\_\_  
F. Wally Sandelin  
Public Works Director

FWS/pmf  
Attachment

**APPROVED:** \_\_\_\_\_  
Blair King, City Manager

# Water Services Infrastructure Replacement Charges & Fund Balance

City Council  
April 16, 2008

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## Water Services Funds

- Water and Wastewater enterprise funds both have “sub-funds” for Operations, Capital and Development Impact Mitigation Fees (IMF)
- State law requires separate fund for IMF  
(not discussed further in this presentation)
- Standard practice provides separation of Operation and Capital funds

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## Historical Background

- All revenue from rates went to Operating fund
- Transfers to Capital fund would be made periodically as needed
- Council directed in 2001 that the rate increase be identified specifically on the bill for infrastructure replacement (not included in Resolution)
- Following 2002 rate increase, the “infrastructure” revenue was placed directly in the capital sub-fund

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## The Problem

- Both Funds have a large cash imbalance between operating (negative) and capital (positive)
  - Water Operating: (\$8.5 million)
  - Water Capital: \$7.5 million
  - Sewer Operating: (\$8.8 million)
  - Sewer Capital: \$11.3 million

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## The Cause

- **Not all of the 2002 rate increase was for capital expenses**
- Motion to approve rate increase included identification on bill, but was not discussed earlier
- Operating costs have increased greater than anticipated
- All “infrastructure” revenue placed in capital sub-fund

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## The Fix

- Make transfers to rebalance operations and capital sub-funds within the water and wastewater utilities
- Place all rate revenue into operation sub-fund, transfer to capital as needed through budget process
- Simplify billing – combine “infrastructure charge” with base charge (keep water PCE/TCE charge separate)
- Options presented at end of presentation

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# Rate Issues

- Historically, the City went many years between rate increases
- Rate adjustments were not planned very far in advance
- Policies regarding internal charges (cost of services) and in-lieu transfer to the General Fund have varied considerably
- Reserve targets were not established

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## Water Services Rate Increase History

Water		Wastewater	
<u>Date</u>	<u>% Chg.</u>	<u>Date</u>	<u>% Chg.</u>
Jul-07	13%	Jul-07	3.4%
Jul-06	13%	Jul-06	2.0%
Jan-06	13%	Jul-05	25%
May-05	2.2%	May-04	25%
May-04	35%	Jul-02	35%
Jul-02	25%	Jan-02	35%
Jan-02	25%	Feb-91	15%
Jun-95	18%	Jan-90	15%
Aug-91	5%	Oct-88	15%
Mar-89	69%	Oct-87	15%
Jun-76	50%	Oct-86	15%
Jun-65	100%	Jan-78	
Aug-55			

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## Progress!

- Transfers to General Fund now cost of service formula based
- Revenue models developed periodically to help establish rate adjustments
- Annual adjustments based on CPI
- Policy to establish reserves

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## 2001 Rate Issues

- Reserves
- Infrastructure Replacement
- Regulatory & Other Requirements
- Operations & Maintenance Cost
- Range of Revenue Requirements Discussed

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# Reserves

- Exhibit from 2001
- Reserves too low
- Financing issues

## Water/Wastewater Reserves

- Present City Policy – Minimum of 15% of annual operating expenses.
- AWWA – 5% annual surplus revenue over total expenses; six to twelve months of O&M expenses, plus one year's debt service.
- City of Tracy – 25% of annual operating plus one year's debt service.
- City of Stockton – 25% of annual operating plus capital reserve (unspecified amount)
- State Of California (Loan Fund Revenue Guidelines – 10% to 50% of annual operating plus capital reserve
- Consultant (Washington State) – 10% of operating, plus \$250,000 contingency reserve (emergency repairs), plus one year's capital costs.
- Recommended Reserve for Lodi Water/Wastewater Utilities:
  - 15% of annual operating expenses, plus
  - \$300,000 capital reserve in Water
  - \$600,000 capital reserve in Wastewater

# Infrastructure Replacement

- Exhibit from 2001
- Focus on some pipes
- Sewer trunk not included
- PCE/TCE issues

## Infrastructure Replacement

- Major City Objective: Provide Resources to Maintain City 's Infrastructure.
- Critical Components of Water/Wastewater System Being Maintained
- Replacement of Underground Facilities – Water Distribution Mains & Services and Wastewater Collection Pipes Is Lagging
  - Replacements Being Done In Conjunction With Other Projects
  - Need to Move Into a Pro-Active Replacement Program Has Been Recognized
  - Staffing Now In Place to Begin Program
  - New Budget (2 – Year) Includes \$300,000 (W) & \$200,000 (WW) per year
    - ✓ Will replace about 2,400 Ft. of pipe
    - ✓ W/WW systems have about 2 Million feet of pipe
    - ✓ 2,400 Ft. represents 0.12% of the system's total footage
    - ✓ At that rate of replacement, a pipe installed today would have to last 824 years before it gets replaced
  - Replacement on a 100-year cycle would require funding of \$2.2 Million per year for water & \$1.8 Million for sewer
  - Replacement on a 75-year cycle would require funding of \$3.0 Million for water and \$2.4 Million for sewer

# Regulatory & Other Requirements

- Exhibit from 2001
- Wastewater treatment costs
  - higher than anticipated
  - \$400 k Fed. grant used for pipes
- Water costs (PCE/TCE)
  - wildly higher than anticipated
  - getting under control now
- Water meter mandate not considered

## Regulatory and Other Requirements

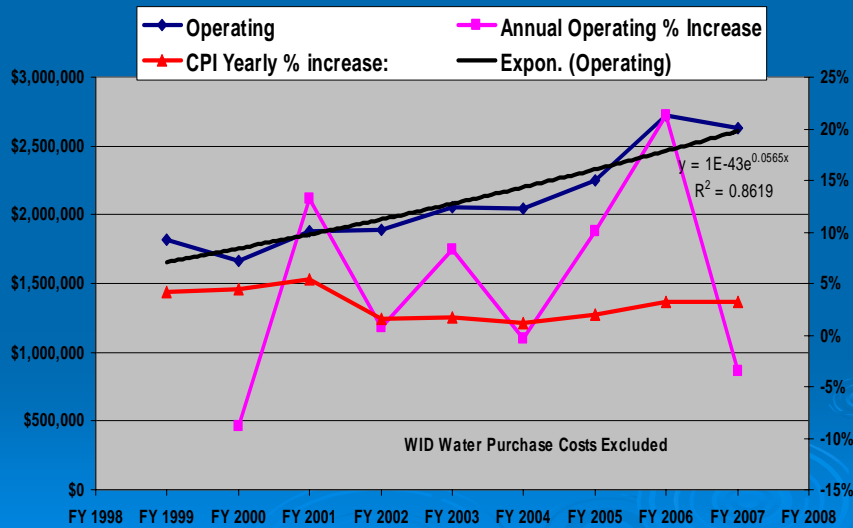
- Wastewater
  - Meet New Discharge Permit Requirements
    - ✓ Estimates in \$34 Million Range
    - ✓ Other Agencies Seeing Additional Requirements & Cost
    - ✓ Some Portion of Cost Will Be Allocated To New Development
    - ✓ Possible Offsets – Grants & Project Partners
  - Energy Cost ? ? ?
  - General Cost of Living/Operations
- Water
  - Regulatory Requirements
    - ✓ Contaminants – DBCP, PCE/TCE, others
    - ✓ Naturally Occurring Elements – Radon, Arsenic
    - ✓ Fluoridation & Chlorination
    - ✓ Cost Impact Will Depend on Levels Established & Grant Funding
  - Provide Additional Supply
    - ✓ Wide Range of Potential Costs -
      - \$35+ M. for Surface Water Transport & Treatment (If Available)
      - \$2 to \$4 M. for Prelim. Engineering & Permits for County Project
  - ✓ Conservation
  - ✓ Possible Offsets – Grants & Project Partners
- Energy Cost ? ? ?
- General Cost of Living/Operations

# Operations & Maintenance Costs

- Vary from year to year
- Have exceeded inflation ( + 3%/year)
  - Water expenses: + 6%/year
  - Wastewater expenses: + 8%/year

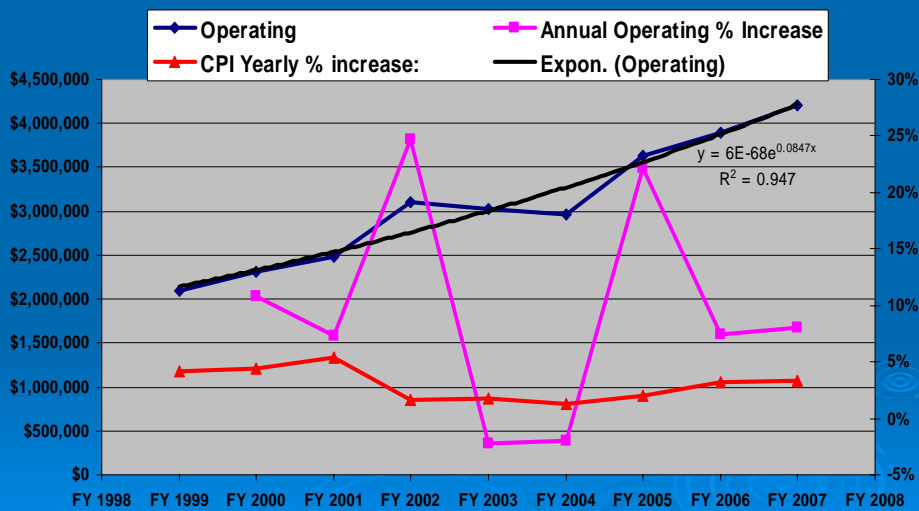


### Water - Operating Expenses



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### Wastewater Operating Expenses



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# Range of Revenue Requirements

- Exhibit from 2001
- Actual revenue lower:
  - Water – avg. \$2.0 M/yr
  - Wastewater – avg. \$2.3 M/yr
- Infrastructure replacement expenditures have been approx. \$850,000 per year in each utility

Increased Revenue Requirements		
\$ Per Year		
<i>Water Utility</i>		
Component	Recommended Program	Potential Program
Sustain Fund Balance w/Reserve	\$45,000	\$ 45,000
Replace Infrastructure	\$2,200,000	\$2,200,000
Alternate Water Supplies	\$ 20,000	\$2,000,000
Total:	\$2,265,000	\$4,245,000
<i>Wastewater Utility</i>		
Sustain Fund Balance w/Reserve	\$ 245,000	\$ 245,000
Replace Infrastructure	\$ 2,000,000	\$ 2,000,000
Wastewater Treatment Upgrades	\$ 370,000	\$ 2,380,000
Total:	\$ 2,615,000	\$ 4,625,000
Grand Total:	\$ 4,880,000	\$ 8,870,000

## Alternatives

A	B	C
Eliminate itemization of "infrastructure replacement" on bill		Keep separate "infrastructure replacement" charge
Going forward, all rate revenue to one account, transfer cash as needed per annual budget		Keep revenues in separate sub-funds
Transfer between sub-funds to eliminate past deficits	Leave existing sub-funds as-is (will balance over time)	Raise rates to cover operating deficits
Update revenue/rate models in FY 08/09		

# Supplemental Information

- Minutes from 2001 Council meeting approving rates
- Water Rate Resolution 2001-231
- Wastewater Rate Resolution 2001-232

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Minutes  
from Oct. 3,  
2001 City  
Council  
meeting

## MOTION (#1) / VOTE:

The City Council, on motion of Council Member Hitchcock, Howard second, adopted Resolution No. 2001-231, pursuant to Section 13.08.010 of the Lodi Municipal Code, providing for and establishing rates to be charged for water service, and further directed staff to:

- add a line item on the utility bills identifying the water cost increase with a description specifying its purpose for infrastructure replacement;
- prepare a long-range, ten-year financial model spreadsheet identifying water, sewer, and electric expenses, including the dollar amount for the utility user tax over this period; and
- at the time of settlement related to the PCE/TCE issue, repay the water fund for the previous \$6 million expenditure, using the balance remaining after priority takes.

The above motion carried by the following vote:

Ayes: Council Members – Hitchcock, Howard, Pennino and Mayor Nakanishi

Noes: Council Members – None

Absent: Council Members – Land

## MOTION (#2) / VOTE:

The City Council, on motion of Council Member Howard, Hitchcock second, adopted Resolution No. 2001-232, pursuant to Section 13.12.240 of the Lodi Municipal Code, providing for and establishing rates to be charged for sewer services, and further directed staff to:

- add a line item on the utility bills identifying the wastewater cost increase with a description specifying its purpose for infrastructure replacement; and
- prepare a long-range, ten-year financial model spreadsheet identifying water, sewer, and electric expenses, including the dollar amount for the utility user tax over this period.

The above motion carried by the following vote:

Ayes: Council Members – Hitchcock, Howard, Pennino and Mayor Nakanishi

Noes: Council Members – None

Absent: Council Members – Land

RESOLUTION NO. 2001-231

A RESOLUTION OF THE LODI CITY COUNCIL  
ADOPTED PURSUANT TO SECTION 13.08.010 OF  
THE LODI MUNICIPAL CODE, PROVIDING FOR AND  
ESTABLISHING RATES TO BE CHARGED FOR  
WATER SERVICE

WHEREAS, pursuant to the requirements of Government Code Section 54354.5, a Public Hearing was held on October 3, 2001, to consider adoption of a Resolution setting and establishing an amended fee schedule for water service rates.

NOW, THEREFORE, BE IT RESOLVED, by the Lodi City Council:

Section 1: The schedule of water service rates for the City of Lodi shall be as shown as follows:

Water Utility	Present Rate	January 2002	July 2002
<b>Residential Flat Rate (per month):</b>			
Single Family Unit (one bedroom)	\$ 8.65	\$ 10.81	\$13.51
(two bedrooms)	\$10.38	\$ 12.98	\$16.22
(three bedrooms)	\$12.45	\$ 15.56	\$19.45
(four bedrooms)	\$14.95	\$ 18.69	\$23.36
(five bedrooms)	\$17.94	\$ 22.43	\$28.04
(six bedrooms)	\$21.53	\$ 26.91	\$33.64
(seven bedrooms)	\$25.82	\$ 32.28	\$40.35
Multiple Family Unit (one bedroom)	\$ 7.42	\$ 9.28	\$11.60
(two bedrooms)	\$ 8.90	\$ 11.13	\$13.91
(three bedrooms)	\$10.68	\$ 13.35	\$16.69
Commercial/Industrial Flat Rate	varies	+ 20% for ea. add'l. bedroom	add 25%
Existing accounts only. New accounts are metered.			
Metered Rate	\$ 0.296	per 100 cu. ft. (approx. 40¢ per 1,000 gal.)	
	\$ 0.397	\$ 0.524	
plus monthly base charge:	\$11.43	¾" meter	No change
	\$17.14	1" meter	No change
	\$22.85	1½" meter	No change
	\$28.58	2" meter	No change
	\$40.00	3" meter	No change
	\$51.43	4" meter	No change
	\$74.29	6" meter	No change
	\$97.16	8" meter	No change
Construction Water Charges:	\$ 0.296	per 100 cu. ft. (approx. 40¢ per 1,000 gal.)	
	\$ 0.397	\$ 0.524	

Water Rate Resolution from  
Oct. 3, 2001 City Council  
meeting

Section 2: The rates established by this Resolution shall be effective January 2002 and July 2002, or applied to the next full billing cycle following the effective date.

Section 3: All resolutions and parts of Resolutions in conflict herewith are repealed insofar as such conflict may exist.

Dated: October 3, 2001

I hereby certify that Resolution No. 2001-231 was passed and adopted by the City Council of the City of Lodi in a regular meeting held October 3, 2001, by the following vote:

AYES: COUNCIL MEMBERS – Hitchcock, Howard, Pennino and Mayor Nakanishi  
NOES: COUNCIL MEMBERS – None  
ABSENT: COUNCIL MEMBERS – Land  
ABSTAIN: COUNCIL MEMBERS – None

*Susan J. Blackston*  
SUSAN J. BLACKSTON  
City Clerk

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RESOLUTION NO. 2001-232

A RESOLUTION OF THE LODI CITY COUNCIL  
ADOPTED PURSUANT TO SECTION 13.12.240 OF  
THE LODI MUNICIPAL CODE, PROVIDING FOR AND  
ESTABLISHING RATES TO BE CHARGED FOR  
SEWER SERVICE

WHEREAS, pursuant to the requirements of Government Code Section 54354.5, a Public Hearing was held on October 3, 2001, to consider adoption of a Resolution setting and establishing an amended fee schedule for sewer service rates.

NOW, THEREFORE, BE IT RESOLVED, by the Lodi City Council:

Section 1: The schedule of sewer service rates for the City of Lodi shall be as shown as follows:

Wastewater Utility	Present Rate	January 2002	July 2002
<b>Disposal to Domestic System:</b>			
Residential (per month) 1 Bedroom	\$ 5.34	\$ 7.21	\$ 9.73
2 Bedrooms (basis for 1 Sewage Service Unit) (SSU)	\$ 7.12	\$ 9.61	\$12.97
3 Bedrooms	\$ 8.90	\$12.02	\$16.23
4 Bedrooms	\$10.68	\$14.42	\$19.47
5 Bedrooms	\$12.46	\$16.82	\$22.71
6 Bedrooms	\$14.24	\$19.22	\$25.95
7 Bedrooms	\$16.02	\$21.63	\$29.20
Moderate Strength (annual per SSU) (Most commercial & industrial unless "high strength")	\$85.42	\$115.32	\$155.68
High strength user:			
Flow (per MG, annual basis)	\$ 411.02	\$554.88	\$749.09
BOD (per 1,000 lbs., annual basis)	\$ 201.14	\$271.54	\$366.58
SS (per 1,000 lbs., annual basis)	\$ 164.42	\$221.97	\$299.66
Grease Interceptor and Septic Holding Tank Waste within City Limits (per 1,000 gal.)	\$62.96	\$85.00	\$114.75
Septic (only) Holding Tank Waste Outside City Limits (per 1,000 gal.)	\$ 133.67	\$180.45	\$243.61
Disposal to Storm Drain System (per MG)	\$66.13	\$89.28	\$120.53

Wastewater Rate Resolution  
from Oct. 3, 2001 City  
Council meeting

Section 2: The rates established by this Resolution shall be effective January 2002 and July 2002, or applied to the next full billing cycle following the effective date.

Section 3: All resolutions and parts of Resolutions in conflict herewith are repealed insofar as such conflict may exist.

Dated: October 3, 2001

I hereby certify that Resolution No. 2001-232 was passed and adopted by the City Council of the City of Lodi in a regular meeting held October 3, 2001, by the following vote:

AYES: COUNCIL MEMBERS – Hitchcock, Howard, Pennino and Mayor Nakanishi  
NOES: COUNCIL MEMBERS – None  
ABSENT: COUNCIL MEMBERS – Land  
ABSTAIN: COUNCIL MEMBERS – None

*Susan J. Blackston*  
SUSAN J. BLACKSTON  
City Clerk

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